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ABSTRACT

This document comments on the accuracy of findings extracted from the Equality of Educational Opportunity Report, authored by a federally appointed research team headed by James S. Coleman. According to the authors, dificiencies and inconsistencies in the study center around the method of collecting data, the design and validity of the instruments used, and the statistical techniques employed in analyzing the information gathered. The presentation argues that these weaknesses produce findings that fail to provide a sound framework upon which to base policy decisions. However, the authors agree that the Report has helped to focus school-related research on "outputs" and that it has a substantial number of other merits. (Author/JF)

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"THE COLEMAN REPORT SAYS . . ."

EQUALITY OF EDUCATIONAL OPPORTUNITY -- ANALYSIS AND POLITICAL IMPLICATIONS

by James W. Guthrie
and Paula S. Morrelli

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August, 1971

PREFACE

"The Coleman Report says . . ." is a caustic and severe commentary on the Equality of Educational Opportunity Report which was authored by the federally appointed research team headed by James S. Coleman. James Guthrie and his assistant Paula Morrelli express strong concern regarding the accuracy of the findings extracted from the Coleman study. Guthrie recognizes the contributions made in the area of educational thinking generally. He believes, however, that using the conclusions of the Report for making educational policy decisions is inappropriate.

Deficiences and inconsistencies can be found throughout the study, according to Guthrie. These cluster around the method of collecting data, the design and validity of the instruments used, and the statistical techniques applied in analyzing the information gathered.

Guthrie contends that, because of the weaknesses of the research, the resulting interpretations assigned by the researchers themselves, and by high level policy makers, have been misleading and at times erroneous. He takes issue also with the decision of the Coleman team to extend the scope of the study to measure disperities of educational opportunity from both the school Input and school Output points of view, with a comparison of these as a concluding effort. This, in Guthrie's opinion, requires a degree of sophistication that could have been achieved only within the dimensions of a much more comprehensive and open-ended project. It is in this context that the Coleman Report is here critqued.

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"THE COLEMAN REPORT SAYS . . ."

EQUALITY OF EDUCATIONAL OPPORTUNITY -- ANALYSIS AND POLITICAL IMPLICATIONS

by James W. Guthrie
and Paula S. Morrelli

Ambiguous interpretations of the Coleman Report's findings pervade every level of education in the United States, even the top. For example, former Presidential adviser Daniel Patrick Moynihan concluded from it that present forms of schooling and teaching were ineffective. Partly on the basis of this judgment the President's 1970 education message and legislative proposals called for a reduction in federal aid to school programs.[1] In the same year, another component of the Executive Branch, the U.S. Office of Education, compiled a volume entitled Do Teachers Make A Difference:,[2] one section of which emphatically responded "they do" and proceeded to cite Coleman Report findings as one line of proof.

One reason that such differing opinions exist is that the Report is within itself inconsistent. For example, in the summary it suggests that spending money on increasing the quality of schooling available to minority groups would increase their achievement level. Somewhat conversely, in the body of the Report, one is left with the impression that schools affect students' achievement very little. However, in addition to apparently speaking with a forked tongue, the Report has other characteristics

which contribute to the confusion surrounding its findings. One of the purposes of this paper will be to discuss these other characteristics.

What accounts for such wide differences in interpretation? What does the Coleman Report actually say? Which, if any, of the several criticisms of the Report are valid? What findings can be relied upon? What are the implications for educational practice? In order to cover these and other questions we will proceed to (1) explain the conditions which accompanied the organization of the research effort, (2) describe the procedures used in conducting the research, (3) discuss the major methodological criticisms which have been offered since the Report was published, (4) comment upon policy implications of the findings, and (5) list the "unknowns" or questions which remain to be answered in the Report's wake.

The official title for the "Coleman Report" is Equality of Educational Opportunity. It derives its shorthand label from the name of the principal researcher involved, Professor James S. Coleman of John Hopkins University. The Report was based on data obtained from the Equality of Educational Opportunity Survey (EEOS). In this paper we typically will use the name "Coleman Report".

The Origin and Purposes of the Coleman Report

In the course of Congressional hearings and Floor debates over the 1964 Civil Rights Act, it became evident that little was known regarding the equity, or inequity, with which school services were made available to students of various racial, ethnic, and social class groups. Consequently, Section 402 of the Act called for a

> "report to the President and the Congress within two years of

> the enactment of this title, concerning the lack of availability of equal educational opportunities by reason of race, color, religion or national origin in public educational institutions at all levels in the United States, its territories and possessions, and the District of Columbia."

In October of 1964, Congress passed the 1965 Supplemental Appropriations Act which contained $2 million for conducting the study. Thereafter, James S. Coleman, a number of individuals from the National Center for Educational Statistics (NCES) in the U.S. Office of Education, and consultants from Educational Testing Service and several universities began the task of designing the Equal Educational Opportunity Survey and the other research studies which would later comprise the Coleman Report. The completed document was issued in late summer of 1966, less than two years after the project was begun. By almost any standard, it was a massive report, two volumes with tables and appendices totaling more than 1200 pages.

Toward what end was so much effort and money directed? Two million dollars is a great deal when compared to what is spent on most educational research projects. To be sure, it was to measure the ". . . lack of availability of equal educational opportunity," but what does that mean? No one gave more thoughtful attention to developing this question than did James S. Coleman himself. An entire issue of the Harvard Educational Review is devoted to the topic of equal educational opportunity and the lead article entitled "The Concept of Equality of Educational Opportunity", authored by Coleman, traces the evolution of this concept through American thought.[3]

Does "equal educational opportunity" refer to a condition in which each child has the same amount of money spent on his schooling; the same quality of teachers and textbooks available to him? Or, viewed in another

light, does it mean that every child should be able to perform at an equal level on some measure of educational outcome? Does it mean that resource "inputs" should be equal, or does it mean that school or student "outcomes" should be equal? As might be imagined, the form and content of one's research efforts hinge heavily upon which interpretation is chosen. Down which path, inputs or outcomes, did the Coleman Report team decide to proceed?

As the research teams began their efforts the definition of equal educational opportunity eventually unfolded in the form of four questions. As stated in the Report's letter of transmittal to the President and Congress,[4] the investigation posed the following queries:

1. What is the " . . . extent to which the racial and ethnic groups are segregated from one another in public schools?"
2. Do " . . . the schools offer equal educational opportunity in terms of a number of other criteria which are regarded as good indicators of educational quality?" (By this the Report meant items such as school facilities, teacher characteristics, curriculum offerings, and so on.)
3. How much do " . . . the students learn as measured by their performance on standardized achievement tests?"
4. What are " . . . the relationships between students' achievement, on the one hand, and the kind of school they attend, on the other?"

In summary then, the Report set out to assess the degree of racial segregation, the equality with which school services were delivered, the level of student achievement, and the association between student performance and school programs and procedures.

It appears that here, in its selection of criteria, the research team

made the first and one of the larger strategic errors. Rather than choosing either an input or output definition of "equality" the team decided to collect information consistent with both definitions. Moreover, in excess of its charge from the Civil Rights Act, it assumed the additional task of relating the two areas in a series of analyses on school effectiveness. Given the restrictions of time and financial resources, plus the fact that research of this nature had little precedent upon which to build, even the simplist research strategy involving the collection of information on equality of educational inputs would have been a difficult task to complete. When it additionally undertook research of outcomes breaking almost totally unplowed ground with a study of school effectiveness, it is miraculous that the team met its statutory obligations to finish in two years.

This point is discussed in detail by John F. Kain and Eric A. Hanushek in their report, "On the Value of Equal Educational Opportunity as a Guide to Public Policy." They contend that, given time and money pressures, the research should have limited itself to a survey of input inequities. In their view this in itself would have been a great contribution and the implications for policy would have been clear. To engage in the other two components of the study curtailed effective research on input comparability and, perhaps worse, confused the issue as to whether or not schools are valid instrument for effective social policy.[5]

We will return later to a discussion of some of the Report's shortcomings which may have resulted from the decision to satisfy such a complex set of objectives and constraints. However, let us turn now to a description of the research procedures involved.

Research Procedures

The primary source of information for the Coleman Report was the Survey of Equal Educational Opportunity, conducted in September and October of 1965. This was one of the largest pieces of social research ever undertaken. Details regarding planning the Survey's procedures are provided in the Coleman Report, beginning on page 548. Consequently, we will restrict ourselves here to a summary of the most important methodological features.

Early in the planning stages, a decision was made to sample approximately 900,000 students representative of the United States public school population. In addition, because a major research objective was to assess equality of opportunity among different races and ethnic groups, it was decided that half the student sample would be composed of majority group (white) children and the remainder of minority group (Negro, American Indian, Oriental American, Puerto Rican, and Mexican American) children.

Approximately 4,000 schools were selected for participation. These were to include high schools and their feeder elementary schools. All students in grades 3,6,9, and 12 within the sample schools were asked to respond to a questionnaire. First grade students in 2,000 of the sample schools were also to be sampled. In addition to students in these five grade levels, teachers, principals, and superintendents connected with the participating schools were requested to respond.

Questionnaires addressed to teachers and administrators were designed to elicit information on a number of dimensions such as personal characteristics (age, sex, education level, years of experience, etc.), socioeconomic composition of student body and school neighborhood, curricular

and extracurricular offerings, physical facilities, and educational philosophy. In addition, teachers took a self-administered vocabulary test which attempted to measure their individual verbal facility.

Questionnaires submitted to students varied by age level in terms of number and technicality of the queries posed. In all instances, however, a portion of the questionnaires was designed to measure students' reading and mathematics achievement. In addition, students were questioned with regard to their home backgrounds, academic aspirations, self-concepts, feelings of efficacy, and so on.

The EEOS findings are grouped by metropolitan and non-metropolitan areas and by geographic region. The United States was divided into seven regions, New England, Mid-Atlantic, Great Lakes, Plains, Southeast, Southwest, Far West, and Rocky Mountains. Statistics on school characteristics were based on average scores for minority and majority group student populations for a school. These school means were then compiled and averaged so as to provide mean scores for regions. Within-school statistics are not provided.

Questionnaire Responses

The rate of response to the measurements varied significantly by region and area (metropolitan or non-metropolitan). Ultimately however, questionnaire responses were obtained from 645,000 pupils. This return, coupled with responses from teachers and administrators, provided a total usable school sample of approximately 70 percent. Stated another way, approximately 30 percent of the schools had to be deleted from the intended sample. Between region and area responses showed considerable variation. In metropolitan areas in the North and West, 82% of the

sample responded. In contrast, only 61% of the non-metropolitan South and Southwest sample responded. The Report contends that analyses of non-responses indicate that none of its findings is biased or invalidated by these non-responses. As we will later describe, certain of the Report's critics strongly dispute this point.

In addition to the EEOS which we have been describing, the Report contains five chapters the findings of which are based on different research studies and survey efforts. For example, a study was made of the characteristics and attitudes of future teachers of minority groups, of segregation in institutions of high education, and of non-enrollments or dropouts. Also, a team of scholars headed by Professor Raymond Mack of Northwestern University conducted ten community case studies of racial desegregation about which we will comment more fully later.

These then are some of the methodological features. A reasonable progression from this point would be to describe the Report's findings. However, we believe that much of the criticism regarding these findings is essentially accurate and, consequently, reshapes and restricts what we wish to say about the Report's results. Therefore, we turn now to a general discussion of Coleman Report criticisms.

Criticisms of the Coleman Report

We have already alluded to one of the strongest criticisms directed at the Coleman team's efforts which is the scope of the project. In attempting to conduct research about (a) equality of inputs, (b) equality of outcomes, and (c) the relationship between the two, resources were spread too thinly and the policy utility of the resulting document was thereby severely compromised. However, at somewhat more technical levels

there is a substantial body of critical literature which faults the Coleman team for its methodological and analytical procedures. It is upon these that we will concentrate.

Technical criticisms can be placed into three categories: (a) those relating to the adequacy of the sample and non-response rates, (b) doubts concerning the validity and completeness of the questions asked on the survey instruments, and (c) appropriateness of the statistical procedure used in analyzing data relating school inputs to student performance.

Sampling and Response

The sampling problem centers primarily upon the lack of response by a sizeable number of schools, teachers, administrators, and students. Instead of obtaining information from 4,000 schools as intended, usable data were gathered for only 3,155. The effective size of the student sample was similarly reduced. Instead of the hoped for 900,000 pupils, adequate responses were obtained for only 569,000. This is a large number, particularly when compared to the 3,000 or 4,000 person samples from which national public opinion surveys frequently operate. Consequently, the Coleman Report reader can be falsely lulled into believing that the large sample size will swamp problems of non-response or sample bias. What must be remembered is that the number of schools involved, not only the number of students, directly affects the validity of the sample. For example, the value attached to the variable "age of school building" is assigned to every pupil in that building. Thus, for many analyses, the effective sample is the number of schools involved, not the number of pupils.

If no systematic bias existed in the way in which schools and their personnel chose not to respond, then the absence of 30 percent or more of the sample schools might still result in an acceptable research design. However, non-response may not have been random. For instance, it is known that school boards and superintendents in several major central cities refused to participate despite sincere promises that no comparisons would be made between school districts and no data would be "leaked". The possibility exists then that big city schools, students, and personnel are underrepresented in the Coleman Report sample. Also, the seemingly large number of sample schools, 3,155, is itself somewhat deceptive when it is realized that these schools must be fitted into sample subsets such as metropolitan/non-metropolitan, geographic region, and grade level. Thus, as seen by at least one set of Report critics, the sample for 12th grade schools in the metropolitan South was based on only 78 schools. These authors state that "61 percent of 1,170 high schools included in the original sample could not be included in the analysis. Moreover, only 74 percent of the sample of feeder schools picked for the responding 689 high schools were included in the final analysis."[6]

In addition to non-response by schools, even when individual students, teachers, and administrators in a school did choose to respond, they did not always do so completely. Non-response was particularly a problem when questions touched upon sensitive areas. For example, Kain and Hanushek state: "In a sample of about 300 elementary schools in the Northeast region . . . , over one third of the principals failed to answer one or more of these questions."[7] The questions to which they refer asked for principals' views regarding racial composition of school faculties. Clearly, such examples of internal non-response to survey

items could bias results sharply. We are faced then with a problem regarding the external validity of the Coleman Report; can its findings be taken as representative of the schools in America? We will hold our response to this question for a moment and move on to a discussion of the other two areas of criticism.

Questions and Survey Procedures

The second category of technical criticisms centers around the appropriateness of content and form of the survey questions. In this regard, Kain and Hanushek write:

> The absence of questions with any qualitative bite is particularly noticeable. There are many questions which relate to the presence of particular attributes, but few that relate to their quality.[8]

Somewhat more condemning is the statement by Edmund Gordon:

> Schools factors may have been found to be of relatively modest importance for all pupils not because what the schools can do is not crucial but because . . . (the study) did not look at what the schools actually do.[9]

These critics reflect the difficulty of focusing on processes in survey research. While it is possible by questionnaire to obtain information such as a teacher's years of teaching experience, alma mater, and verbal ability, the same cannot be said for items such as "ability to motivate students," the degree to which an instructor provides a strong positive adult model with which his or her pupils can identify, or whether or not the teacher actually matches instruction to the needs and ability level of each pupil. In the absence of information regarding process variables, the Report relied on what researchers label "status variables" such as those exemplified above (age, sex, etc.). These are inadequate measures for what teachers do or should do in classrooms.

In addition to an absence of queries regarding instructional processes, the Report simply obtained inaccurate information from some questions. For example, superintendents were asked to state the average annual dollars spent per pupil in their districts. The analysis done with this item of information results in a finding that dollars have little or no explanatory power in accounting for the differences in student achievement. Critics have reacted unfavorably to the use of expenditure information in the form in which it was gathered by the Report since it represents a district-wide <u>average</u> and thereby masks the range in per pupil expenditures which typically occurs within a district.[10] Almost every district contains schools which teachers view as being "desirable" and others which they see as being "undesirable" places in which to work. Teachers with seniority (and higher salaries) tend to wend their way to the desired schools, leaving new teachers and long-term substitutes (those with lower salaries) to occupy the undesirable schools. When the differences in teachers' salaries between schools are taken into account, a substantial difference in per pupil expenditures may occur. This is not even to engage in the discussion of budget costs versus audited expenditures per pupil as a criticism. Meyer Weinberg contends, probably correctly, that there typically is a substantial difference, school by school, in what is budgeted at the beginning of a year and what actually is spent.[11]

<u>Validity and Completeness</u>

Another facet of the survey technique which casts doubt upon the Report's results is the self-report nature of the questionnaires. Students are asked questions regarding their parents' education level and occupation, the answers to which it is conceivable they do not know

accurately. Teachers were asked questions about themselves and there was a possible temptation to falsify the response. For example, number of years of schooling, salary, or degrees. Moreover, teachers' verbal facility was measured by a self-administered vocabulary test.

Statistical Procedures

The third level of technical criticism was first dealt with in print by Samuel S. Bowles and Henry M. Levin in their two articles in the Journal of Human Resources. The issue here is that the Report's author employed a form of statistical analysis which is inappropriate if a high degree of intercorrelation among "independent" (input) variables exist. The Coleman Report attempted to explain variance in achievement scores by successively adding different independent variables to a regression analysis. The outcomes of this approach are highly sensitive to the order in which the explanatory variable are entered, whenever the explanatory variables are interrelated.[12]

Coleman Report measures of socioeconomic conditions and school services are highly interrelated and do not meet the criterion of independence. The argument here is that higher quality school services tend to be made available to students from high socioeconomic strata and lower quality school services to students from low socioeconomic strata. If in a regression analysis "independent" variables are in fact highly intercorrelated, whichever variable cluster (socioeconomic status or school services) is first placed in the equation will have the highest explanatory power. The first cluster entered will have exhausted the major portion of whatever variance exists to be explained by the total of the two variable clusters together. The analysis

involved in the Coleman Report chose to place socioeconomic status variables into the equation first. Not unexpectedly it was "discovered" that this cluster explained substantially more variance than did the school service cluster. Had the entry position of the two clusters been reversed, school service would have been found to be the major contributor to pupil performance. This is exactly what several other researchers including Bowles and Levin did, in order to demonstrate the faults in this approach. They, indeed, found the expected results. When entered first, school service variables explained a greater proportion of the variance.

The reason given for entering pupils' social background characteristics into the regression equation ahead of school service variables is very interesting. It reveals the lack of thought, probably because of lack of time, given to planning the Report's analyses.

> Since the student's background is clearly prior to, and independent of, any influence from school factors, these background factors can and should be held constant in studying the effects of school variables. Thus, the variation in achievement and attitudes to be explained by school variables in (sic) that left after variation explained by family background differences is taken out.[13]

There are numerous other smaller methodological errors which appear in the Report. For example, students who had transferred from one school to another tended to be matched with the characteristics of their present school, even if they had been there for only a few days. Also, it has been found by subsequent analyses of the EEOS questionnaires that the non-response of students to certain questions is not random. We could continue in this vein for some time. However, we think the point regarding the Report's flawed methodology is now clear.

Coleman Report Findings and Educational Policy

In light of the methodological shortcomings illustrated above, what

can be salvaged from the Report that has implications for school policy-makers and practitioners? In terms of the Report's first two criteria, that of assessing the equality of educational opportunity in terms of "inputs" to the schools and "outcomes" of the schools, the criticisms we described render the Report's findings highly speculative. This is so primarily because of the shortcomings of the sampling procedures and response rates. The lack of more potent questions on the survey, and the appropriateness of statistical procedure also lessen the overall usefullness of the Report.

Distribution of School Services and Resources

In addition to assessing the state of pupil segregation, the Report attempted to examine the degree to which school services were distributed equitably among students of differing races and ethnic groups. Here the Report makes statements such as:

i. ...for the Nation as a whole white children attend elementary schools with a smaller average number of pupils per room (29) than do any of the minorities (which range from 30 to 33).[14]

ii. Nationally, at the high school level, the average white has 1 teacher for every 22 students and the average Negro has 1 teacher for every 26 students.[15]

iii. Negro pupils have fewer of some of the facilities that seem most related to academic achievement. They have less access to physics, chemistry, and language laboratories; ...[16]

Our argument there is not that the Report did not indeed find the above to be true. Nor do we wish to contend that minority groups are not discriminated agains. Rather, our position is that, given the sampling shortcomings described by Kain and Hanushek and others, there simply is no way of telling whether or not these findings are representative of the entire nation or any region in it.

It may very well be that discrimination, both at the time of the Report and presently, is even worse than the findings depict. In fact, when we consider the second methodological difficulty, the Report's failure to inquire intensely as to instructional processes, it is possible that discrimination is even more subtle and destructive than what is described. It may very well be that a number of white and minority group schools appear equal or close to equal on status measures such as teachers' experience or number of years of education. However, if these teachers of minority children are dissatisfied with their positions (a Report finding), would rather teach in another school (another Report finding), or worse yet, "if they had it to do all over again, they would not enter teaching" (again, a Report finding), then what does this say regarding the quality of instruction that they may be offering the students in their charge? It seems to us that the possibility is great that, in terms of the processes which constitute the essence of education, minority group children may be the victims of worse discrimination than the EEOS depicted.

Measurement of Pupil Outcomes

In terms of the Report's findings regarding the second question's dimension, equality of educational opportunity in terms of student outcomes, we have no serious disagreement. From the achievement tests administered at the five grade levels, the Report assessed the relative performance of students by race and ethnicity. The following paragraph illustrates the principal findings:

> With some exceptions -- notably Oriental Americans -- the average minority pupil scores distinctly lower on these tests at every level than the average white pupil. The minority pupils' scores are as much as one standard deviation below the majority pupils' scores in the 1st

> grade. At the 12th grade, results of tests in the same verbal and nonverbal skills show that, in every case, the minority scores are farther below the majority than are the 1st graders. For some groups, the relative decline is negligible; for other, it is large.[17]

Because this set of findings is perfectly consistent with the results of previous studies, we have little cause to doubt it. Moreover, the size of the discrepancies between races is so large as to be convincing regardless of any sampling bias which may have occured. However, for policy purposes, one must step beyond the findings and inquire as to what causes are operating to bring about these results and what policy levers schoolmen can pull in order to rectify the situation. Here is where the Report comes up short, leaving us with the impression that nothing presently being done is effective and suggesting no new procedures.

Relationship Between School Inputs and Outcomes

Despite our rather strong indictments of the Report up to this point, it is with regard to its third objective, assessing the relationship between school inputs and outcomes, that we wish to fire our largest critical salvo.

After having allegedly controlled for the social background of the student, Coleman team analysts tested a number of school service variables in relation to pupil achievement, and their summary finding is:

> Taking all these results together, one implication stands out above all: That schools bring little influence to bear upon a child's achievement that is independent of his background and general social context; and that this very lack of independent effect means that the inequalities imposed upon children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school.[18]

This finding should be read carefully. It does not say that schools

cannot make any differences in what children learn. It only says that, from the EEOS sample results, it could not be seen that schools made any difference independent of a child's background and social context. From this statement, many have concluded that the process of schooling is an inappropriate avenue for attempting to aid economically depressed groups. Remember President Nixon's Education Message to which we referred at the beginning of this paper.

It may be true, though we doubt it strongly, that schools have little effect on the learning of pupils. The point is that nothing in the Report justifies such an interpretation. Why not? Because there is a much more plausible explanation of the finding described in the above quotation than "schools do not make a difference." That explanation, as we have hinted earlier, is that schools appear to have no effect that is independent of a student's background and social context, because, in general, this nation dispenses school services in accord with the social background of children. Simply put, students from wealthy households have high quality schools available to them whereas their less forunate low income counterparts are provided with lower quality services. A consequence of this discriminatory pattern is to tie a student's school achievement to his socioeconomic circumstances and to make it appear that schools make little or no difference.

Racial Integration and Academic Achievement

An additional Coleman Report finding which deserves particular attention is that which pertains to the influences of racial integration upon students' academic achievement. This is an area in which many of us desire to have all possible proof that students of all stripes learn more in an integrated

setting. Indeed, it is an area in which a great deal of positive evidence aside from the Coleman Report has already been amassed.[19] The Report states ". . . analysis of the test performance of Negro children in integrated schools indicates positive effects of integration, though rather small ones." [20] The finding is based on the reading comprehension and mathematics achievement test scores of 6th, 9th, and 12th grade Negro students taking into account the proportion of their classmates who, in the previous year, were white. Generally, Report statistical tables on this topic reveal that Negro students' test scores are very slightly higher when they attended schools the previous year in which more than half their classmates were white.

On the surface it appears to be sound evidence of the beneficial effects of integration for Negro students. This finding, however requires careful scrutiny. Sixth grade students in the metropolitan Midwest who attended all-Negro schools the previous year actually scored higher on reading tests than their peers who attended racially integrated schools, even schools where more than half the student body was white. Moreover, for almost every grade level a Negro student was better off, in terms of his achievement scores, if he attended an all-Negro school than if he were in an integrated school, but one in which only half or less than half of his classmates were white.

Achievement and Socio-economic Strata

These results suggest a powerful alternative explanation. From what we know about residential patterns, a Negro student who finds himself in a classroom which is composed of more than 50 percent white students is very likely himself to be from a middle or higher income household.

Otherwise, in the absence of integration programs of which there were not very many at the time of the Report, a Negro student simply was not likely to live in close proximity to a white school. Conversely, for a Negro student to be in a school which had some but not a majority of white students, suggests strongly that the school was in a residential area composed of lower income households. Thus, what we are suggesting is that the achievement test findings attributed by the Report to integration can indeed be explained just as easily by social class. High socio-economic status Negroes have a better chance to go to a majority white school. Thus, aside from any effects of integration itself, they are simply likely to score higher because of the educational advantages provided in their home and neighborhood.

Racial Integration and Pupil Performance

As we have repeatedly stated, the Coleman Report does not provide sufficiently strong evidence upon which to base a public policy of school racial desegregation. However, even though controdictory findings exist, the weight of the research evidence is that interracial contact can have a positive effect upon pupil performance. We do not wish to describe all these studies in detail.[21] However, we would like to offer a few observations on the dynamics which may underlie racial integration and its effects on pupil performance. By such an explanation we hope to shed light on the practical actions which need to take place in order to bring about positive results for both black and white pupils.

An Early View

At the time of the famous 1954 Brown v. Board of Education decision

of the U.S. Supreme Court, the following explanation was given of the value of racial desegregation. In racially segregated circumstances it was believed that a black student would come to view himself and his peers as less worthy than white students. School desegregation was thought to relieve this problem, and a healthy outcome was anticipated on grounds that the larger society was acknowledging the innate equality of the two races. Black students could attend schools with whites. Such a demonstration, it was held, would have its effects on the subtle way an individual's self concept is molded, and blacks would eventually come to see themselves as equal to whites. The dynamic behind this belief was the equivalent of Cooley's "looking glass self" theory. Namely, we come to view ourselves in part as we think others view us. If others, particularly the majority of society, see us as inferior and act that way toward us, then we are likely to adopt that view of ourselves. A rationale for school desegregation was that common schooling for blacks and whites would begin to erace the negative racial feedback theretofore received by black students.

It may well be that this "theory" still holds explanatory power. However, it is interesting to speculate on the extent to which contemporary development of greater black consciousness and pride may have eroded its validity. That is to say that black persons today may less and less see themselves as being inferior. Such a change in their self perceptions could come about for at least two reasons: First, many whites may have begun to change their perceptions of and behavior toward blacks. Second, regardless of whether or not whites have changed, blacks have begun to develop prideful countermeasures, activities such as Black Studies courses, black drama, and black political action. This is

conjecture, but it could be that the "looking glass self" theory no longer, if it ever did, explains whatever positive effects occur for black pupils as a consequence of school integration.

The "Self-Fulfilling Prophecy" Theory

Another explanation of how it is that racial integration may accrue to the benefit of black students stems from Robert Merton's idea of self-fulfilling expectations. In short, thinking something is true may indeed make it come true. A simple illustration of this is a run on a bank when a rumor is circulating that it is in danger of becoming insolvent. Upon receiving such information, depositors rush to withdraw their funds and, as a consequence of their actions, the bank may indeed become insolvent.

In terms of students and schools, the idea operates in this fashion. Teachers, probably both black and white, may hold a belief that black students are not capable of achieving well in school. They may arrive at this conclusion because they hold racist ideas or because they think depressed home background and neighborhood environments have so damaged black students as to lower their ability to perform well in school. In either case, in holding low expectations for black students teachers begin to behave toward them in a very difference fashion. The exact dynamics are not known, but it is thought that in some subtle manner the teacher communicates the feeling that he does not expect the child to do well. This might involve unconsciously grading on a more difficult standard, thus giving the child a lower mark for the same quality of work as a white child. Or, perhaps, the teacher simply does not accord the black child the same amount of instructional time, feeling

that the effort is not justified in terms of the child's ability to learn. In any event, the outcome is to depress black student achievement.

The "White Hostage" Theory

This explanation holds that black children can achieve better in a racially desegregated setting because, by having white children in the same school, white parents (the community power structure) will be concerned about the quality of the school. In the absence of white children, this theory holds, a school having an all-black enrollment will tend to have lower quality school services than an all-white school. However, if white parents know their children are going to attend a school, they will make every effort to have the best possible teachers, equipment, facilities, and so forth. The theory assumes, with apparent validity, that white parents typically have greater potential for influencing school decision makers than do black parents. Thus, once having white children in the school, resources and services are more likely to be equalized. Once provided with equality, black students are in a position to improve their school performance.

The "Social Class Interaction" Theory

At the roots of this theory is the idea that the value structure of a school's student body is shaped greatly by the ethos prevailing among the majority of the youngsters attending the school. If the school is populated by students who value academic pursuits, then this is the dimension along which students will bestow each other status. If, as Coleman found typically to be the case, students highly value athletic

performance, then this is the dimension which will set the tone for the school. Whatever the value tone, most students will guide their behavior in accordance with it. It matters less if teachers base their reward system upon academic performance. The thing which is held to matter most for students is the reward system constituted by their peers' approval. What a student wants, particularly an adolescent student, is to be popular among his schoolmates. Despite what teachers think is important, it is what students think is important which will shape their goals and actions

In racially desegregated schools, when students are from differing social strata, the chance is good that the value systems of black and white students may differ as to the importance they place upon academic achievement. There is little evidence that black students differ markedly from white students with regard to their concern for academic performance if they are from the same socioeconomic stratum. That is, low SES whites are no more oriented toward high performance than are low SES blacks. When racial integration occurs across SES boundaries, it is thought that the more academically oriented value structure of the white students, if they are in the majority, will influence the values and actions of black students. In this way, the black students may come to strive for higher academic achievement.

Practical Implications

At this point in time, there is no clearcut evidence as to which of the previously described "theories" is correct. It may be that they are all in part correct; that is, racial integration may work for all of the reasons given. Or, it may have an effect upon pupil performance for

reasons not yet enunciated. Regardless, given existing evidence, it would appear wise to take all theories into account when planning school desegregation. Translating the theories into practical outcomes would mean taking actions such as the following: improving and protecting student self image; guarding against the "self-fulfilling prophecy"; overcoming the white hostage theory; and maximizing social class integration.

Improving and Protecting Student Self Image

If racial integration is to influence black students' performance by improving self image and relieving them of feelings of inferiority, then careful attention must be aimed at building special instructional curricular activities. In light of recently accumulating evidence that racial contact with white students sometimes actually lowers the self esteem and aspiration level of black students, these would seem to be particularly important activities upon which a school administrator and staff should concentrate.

Guarding Against the "Self-fulfilling Prophecy"

How one does this is not precisely clear. However, when the self-fulfilling prophecy has negative connotations, it would seem that progress could be made simply by informing teachers of the tendency for this phenomenon to operate. For teachers who are not racially prejudiced, it would pay to admonish them to guard against expressing any expectation of inferior performance by minority students.

Overcoming the White Hostage Theory

In light of increasing evidence that there is widespread disparity in the resources and school services delivered to black and white students, this seems a particularly important dimension to attack. Federal government guidelines for the expenditure of ESEA Title 1 funds now require "comparability" in local district funds prior to the deployment of federal dollars. The Serrano v. Priest decision of the California Supreme Court hints that widespread action to alleviate expenditure and resource disparities may soon be in order. Moreover, Judge Kelly Wright's decision in reviewing the Hobson v. Hansen case makes it clear that the court will accept only the most minimal discrepancy in adjudicating cases which question interschool expenditure and school service quality. The implications for local school district administrators are clear. Even in a racially desegregated school district, every effort should be made to eliminate resource and instructional inequities based upon race or social class. When this is done, then the white hostage theory will have less validity.

Maximizing Social Class Integration

If the fourth "theory" we described above is in any way valid, then it strongly implies that effective racial desegregation must take place across social class lines. This does not mean in every case that whites must be in the majority. In those instances where it would be possible to constitute more than fifty percent of a school's enrollment with middle SES black youngsters, the overall effect should still be positive if the remainder of the school were constituted of low SES white students. Of course, this should not prohibit efforts to integrate both middle

class white and black students. Presumably such an effort, though perhaps not affecting the academic achievement of either group, may, nevertheless, result in better attitudes about each other on the part of students from both races.

Desegregation and Integration

At the time of the original Supreme Court decisions, the words "desegregation" and "integration" were used interchangeably, if not by judges at least by educators. Today, a distinction is drawn between the two. "Desegregation" has come to mean the racial mixing of school enrollments. "Integration" has come to stand for the instructional reforms which are, or should be, made to derive maximum benefits from having black and white students in school together. In large measure this distinction has come about because a number of evaluations have not been able to demonstrate that desegregation has led to the anticipated benefits, either for black or white children. As a consequence, individuals have come to realize that there is little or no magic in a simple mixing of the races in schools. Indeed, it may be a racially prejudiced view which holds that the simple placement of a black student next to a white student will result in a change in the attitude of either and the performance level of the former. Why should one think that sitting next to a white students should work some miracle upon a black student? With this realization, educators in a few places have begun to try "integration." The effort here is to revise the instructional program and behavior of teachers so as to maximize achievement in racially mixed schools. The Coleman Report offers some assistance in such efforts. The report contains a series of case studies. For

the most part these describe efforts to desegregate schools and communities, and the difficulties which frequently accompany such ventures. By reading these reports one can also gain an understanding of the fact that more than simple racial contact must occur. For detailed knowledge of what would constitute an effective "integration" program, one needs to consult something in addition to the Coleman Report.

Summary and Conclusion

Our primary thesis has been that, contrary to the good intentions and strenuous efforts of the researchers involved, the findings of the Coleman Report are too speculative to be taken as fact. This is not to say that the Report's contents are false, such would be too strong a condemnation. Rather, it simply is the case that the research contains far too many questionable procedures to warrant the acceptance of its results as "true." Moreover, because of these frailities, the Report's findings do not provide, in themselves a sound framework upon which to base policy decisions.

Despite errors connected with the Coleman Report, the effort served admirably to advance the state of the art for educational research. One overwhelming lesson, regardless of the sponsor of such large-scale future research, is that an attempt should be made to restrict the scope of the effort so as to be consistent with the time, resources, and available methodological sophistication. To study school inputs, outcomes, and effects all at once is a monumental undertaking even for a much more comprehensive program in terms of time, than was permitted for the Coleman Report.

A second lesson pertains primarily to studies of school effectiveness. Two major changes must be made in order to progress on this

front. First, pains should be taken to collect information regarding the educational process itself. We must record what teachers do and how they interact with students, rather than how old they are, how many words they know on a vocabulary test, or how many college hours they have accumulated. Secondly, we must follow students and their teachers over time. To take one segment of results as a survey does, and assume that this is representative of a student's accumulated successes or failures is inappropriate.

In the same fashion, better information regarding the effects on students of going to racially integrated schools will require a massive research effort extending over many years. It is highly probable that one-dimensional surveys have exhausted their usefulness in providing us with additional information on this topic.

In conclusion, we find the Coleman Report to contain too many flaws to be immediately useful or purposes of deciding educational policy. At the same time it should be noted that the Report has a substantial number of merits. One of these is that while not adequately covering the subject, it has helped to focus school-related research on "outputs," what it is that students learn. For too long prior to the Report little effort has been made by educational researchers to measure results of the educational process except in the area of academic achievement. Consequently our knowledge of the broader aspects of education has been curtailed. The Report has undoubtedly prompted more immediate focus on the relative significance for learning, of schools, and of other social conditions. That is to say, it reminds us of the difference between "schooling" and the broader phenomenon of "education."

Footnote References

[1]See Congressional Quarterly Weekly Report, Volume 2, No 10 pp. 661-724.

[2]Do Teachers Make A Difference? U.S. Office of Education (Washington, D.C.: U.S. Government Printing Office, 1970.

[3]Harvard Educational Review, Volume 38, No. 1, Winter 1968, pp. 3-22.

[4]James S. Coleman, et al. Equality of Educational Opportunity (Washington, D.C.: U.S. Government Printing Office, 1966, pp. iii-iv.)

[5]John F. Kain and Eric A. Hanushek, "On the Value of Equal Educational Opportunity as a Guide to Public Policy," Discussion Paper #36 for the Program on Regional Urban Economics (Cambridge: Harvard University, 1968).

[6]Kain and Hanushek, op. cit., p. 14.

[7]Ibid., p. 15.

[8]Ibid., p. 17

[9]Gordon is quoted in Meyer Weinberg, Desegregation Research: An Appraisal (Bloomington: Phi Delta Kappa, 1970) Second edution) p. 292.

[10]Charles E. Hansen, "Central City and Suburb: A Study of Educational Opportunity: (unpublished doctoral dissertation, University of California Berkeley, 1969).

[11]Weinberg, op. cit., 290, 292.

[12]Samuel S. Bowles and Henry M. Levin, "More on Multicollienearity and the Effectiveness of Schools," Journal of Human Resources, Volume III, No. 3, Summer 1968, pp. 393-400.

[13]James S. Coleman, et. al., Equality of Educational Opportunity, p. 330

[14]Ibid., p. 9

[15]Ibid.

[16]Ibid.

[17]Ibid., p. 9

[18]Ibid.

[19]See Thomas F. Pettigrew, "School and a New Model for Racial Integration," in New Models for American Education, James W. Guthrie and Edward Wynne (eds.) (Englewood Cliffs: Prentice Hall, 1971), pp. 162-193.

[20]James S. Coleman, et al. Equality of Educational Opportunity, p. 29.

[21]See, for example, Robert P. O'Reilly (ed.), Racial and Social Class Isolation in the Schools (Praeger: New York, 1970), and Meyer Weinberg, Desegregation Research: An Appraisal.

BIBLIOGRAPHY

Irene Albert and Pamela Sheldon, "Equality of Educational Opportunity," Educational Leadership, December, 1966.
E

Joseph Alsop, "Reaction to the Coleman Report," N.E.A. Journal, September, 1967

David Blumenthal, "Coleman Report Brings Revolution, No Solution," Harvard Crimson, November 28, 1967.

Samuel S. Bowles and Henry M. Levin, "More on Multicollinearity and the Effectiveness of Schools," Journal of Human Resources, Volume III, No. 3, Summer, 1968. pp. 393-400.

Samuel S. Bowles and Henry M. Levin, "The Determinants of Scholastic Achievement -- An Appraisal of Some Recent Evidence." Journal of Human Resources, 3 (Winter 1968).

Harry C. Bredemeier, "Schools and Student Growth," The Urban Review April, 1968. p. 21-27.

James S. Coleman, The Concept of Educational Opportunity, paper read at a conference at the Harvard University Graduate School of Education, October 21, 1967.

James S. Coleman, "Toward Open Schools," Public Interest, Fall, 1967.

James S. Coleman, "Equal Schools or Equal Students?," The Public Interest, Volume 1, Summer, 1966, pp. 70-75.

James S. Coleman, "Equality of Educational Opportunity: Reply to Bowles and Levin," Journal of Human Resources, 3 (Spring 1968).

James S. Coleman et. al. Equality of Educational Opportunity. Washington: U.S. Office of Education, 1966.

Robert A. Dentler, "Equality of Educational Opportunity -- A Special Review," Urban Review, December, 1966.

Henry S. Dyer, Social Factors and Equal Educational Opportunity, paper presented before the American Psychological Association, September 3, 1967.

Edmund W. Gordon, "Equalizing Educational Opportunity in the Public School," IRCD Bulletin, November, 1967.

Meg Greenfield, "What is Racial Balance in the Schools?" Reporter, March 23, 1967.

Christopher Jencks, "Education: The Racial Gap," New Republic, October 1, 1966.

Irwin Katz, Desegregation or Integration in Public Schools? The Policy Implications of Research, unpublished paper prepared for the National Conference on Equal Educational Opportunity in American Cities, sponsored by the U.S. Commission on Civil Rights, November 16-18, 1967.

Irwin Katz (Reply to review by Nichols in December 9, 1966 issue of Science), Science, May 13, 1967.

George W. Mayeske, Frederick D. Weinfeld, and Albert E. Beaton, Jr., Item Response Analyses of the Educational Opportunities Survey Teacher Questionnaire, Analytical Note No. 59 (Washington, D.C.: Division of Operations Analysis, National Center for Educational Statistics, May 18, 1967.

Daniel P. Moynihan, "Sources of Resistance of the Coleman Report," Harvard Education Review, Volume 38, No. 1, Winter, 1968, pp. 23-36.

Floyd McKissick, "Is Integration Necessary?" New Republic, December, 1966.

Deborah Meier, "The Coleman Report," Integrated Education, December, 1967

Alexander M. Mood, Murray Spitzer, David S. Stoller, and Frederick D. Weinfeld, "Are Better Schools Better?" Science, May 12, 1967.

Robert C. Nichols "Schools and the Disadvantaged," Science, Volume 154, December 9, 1966, pp. 1312-14.

Robert C. Nichols (Rejoinder to letters by Katz, Mood, and others) Science, May 12, 1967.

Thomas F. Pettigrew, The Consequences of Racial Isolation in the Public Schools: Another Look, unpublished paper prepared for the National Conference on Equal Educational Opportunity in America's Cities, sponsored by the U.S. Commission on Civil Rights, November 16-18, 1967.

Thomas F. Pettigrew, Race and Equal Educational Opportunity, unpublished paper presented before the American Psychological Association, September 3, 1967.

Report of the Harvard Faculty Seminar on the Equal Educational Opportunity Report, Group A, drafted by Frederick Mosteller, May, 1967.

Reviews by Leonard A. Marscuilo and Harold W. Pfautz, in the "Review Symposium," American Sociological Review, Volume 32, No. 3, June, 1967, pp. 479-483.

William H. Sewell, "Review," American Sociological Review, Volume 32, No. 3, June, 1967, pp. 475-479.

William H. Sewell, Leonard A. Marascuilo, and Harold W. Pfautz, Review Symposium on the Equal Educational Opportunity Survey, American Sociological Review, June, 1967.

Marshall S. Smith, "Comments on Bowles and Levin," Journal of Human Resources, Volume III., No. e, Summer, 1968, pp. 384-389.

U.S. Congress, 89th 2nd session, Senate, Committee on Governmental Operations, Subcommittee on Executive Reorganization, Federal Role in Urban Affairs Hearings Part 2 and 6 (Washington, D.C.: Government Printing Office, 1967).

U.S. Office of Education, Supplemental Appendix to the Survey on Equality of Educational Opportunity (Washington, D.C.: Government Printing Office, 1966).

Letters to Senator Abraham Ribicoff from Ernest Q. Campbell, James S. Coleman, and Harold Howe II, Part 2, pp. 343, 348-349, and letter from Campbell to Senator Albert Gore in Part 6.